

A P P E N D I X **M**

ANALYSIS FOR OBSOLESCENCE

An obsolescence. **review** is a limited comparative **cost** analysis performed to determine whether total overall systems **life** cost savings are obtainable with newer ADPE technology, relative to operation of **outdated** ADPE (either the CPU **or** other components **of** the total mainframe ADP system), The analysis **shall** include (but "not necessarily be limited to) consideration of the following items for both the existing outdated ADPE and the replacement ADPE as appropriate:

(a) Systems acquisition costs: Purchase price of replacement system or net lease cost of replacement system, including emulators and simulators.

(b) System operating costs:

(1) Maintenance and operations costs (preventative maintenance and unscheduled downtime);

(2) Energy cost (operating and cooling of central processing units **(CPUs)** and peripherals); and,

(3) Timesharing service to supplement capacity lost due to downtime.

(c) Hidden **costs** of equipment operation:

(1) Personnel (e.g., operators, programmers, and systems analysts costs such as unscheduled personnel overtime and **manual** labor to replace normally automated functions); and,

(2) Floor space costs **(CPUs, peripherals, and personnel)**.

(d) Auxiliary hardware costs:

(1) Uninterruptible power supplies;

(2) 'Front end data communication processors;

(3) Peripheral equipment controllers;

(4) Communication adapters; and, "

(5) Hardware optimizers.

(e) Conversion cost, if applicable.

(f) Administrative costs of the acquisition process.

(g) Present value of money.

